DOI:https://doi.org/10.61841/xsjcnq63 **Publication URL:**https://nnpub.org/index.php/EL/article/view/254**8**

THE IMPACT OF AN EDUCATIONAL CURRICULUM BASED ON THE FORREST MODEL REGARDING SOME MOTOR ABILITIES AND THE LEARNING OF THE ART OF STANDING ON THE FLOOR IN ARTISTIC GYMNASTICS FOR FEMALES

Assist. Prof. Dr. Abeer Ali Hussein

University of Karbala / College of Physical Education and Sports Sciences/Iraq.

Corresponding Author:
abeer.ali@uokerbala.edu.iq

To Cite this Article:
Ali Hussein, A. (2025). THE IMPACT OF AN EDUCATIONAL CURRICULUM BASED ON THE FORREST MODEL REGARDING SOME MOTOR ABILITIES AND THE LEARNING OF THE ART OF STANDING ON THE FLOOR IN ARTISTIC GYMNASTICS FOR FEMALES. International Journal of Advance Research in Education & Literature (ISSN 2208-2441), 11(1), 13-18. https://doi.org/10.61841/xsjcnq63

ABSTRACT

Artistic gymnastics floor shifts for female students. For the third portion, it involved creating a research population that included Third-stage female students at Karbala University studying physical education, numbering (55) students. The sample was chosen by a simple random method, which divided it into two groups (experimental and control). The numbering process was as follows: (50) experimental samples were chosen, (5) were exploratory experiments, and the researcher selected (50) of the research sample. The variables of height, weight, and abilities were measured because of their association with height, weight, and the variables in the study, for the purpose of extracting the variance coefficient. To reveal and ensure the equality of the groups, the researcher employed the (t) test for both groups. It included the educational program for acquiring the researched ability as well as organizing activities within the educational program. The quantity of educational units was (8) and the duration of each was (90), The researcher's findings were as follows: the educational program had a positive effect on the development of motor skills, increased motivation, and saved time and energy. Creating a educational program using the Forrest model in regards to some motor abilities and learning the art of standing on the floor of the mat in women's artistic gymnastics. The results demonstrated that the students of the third stage have a preference for the learning style of the Forrest model in the development of motor abilities and the learning of the skill of standing on the mat in the practice of artistic gymnastics for females. The researcher suggested that it's more effective to focus on the pedagogical structure that promotes the student's learning according to their preferences, desires, and abilities. This will allow them to test their knowledge according to their wishes. It's more effective to conduct a similar investigation for other participants and students of physical education and sports science colleges.

KEYWORDS: *Curriculum, motor abilities and gymnastics.*

INTRODUCTION

Recently, the sports field has seen significant growth due to the scientific and technological evolution in the field of physical education sciences and sports sciences as well as other fields. This is due to the development of scientific studies, specifically regarding the mental processes of humans, this has led to the development of sports. The process of learning is one of the foundations of the educational process; this process defines the life of a living being during its birth. Until his passing, the human spirit in its various forms is not devoid of knowledge and movement instruction.[1]

Learning models and their methods represent an important focus in students' teaching and learning by providing them with knowledge and positive attitudes. One of the best educational models is the Forrest model, which is accompanied by fun and entertainment. It helps learners learn the basic concepts, facts and figures of the contents of the educational content and realize the relationship between them. The Forest model is defined as a method of participation and direct communication, intended to develop the imagination, push mental perceptions and visual representations to the recipient's mind, and includes the story and the techniques of telling it verbally and visually for the learners through verbal performance, changing the pitches and tones of the voice, imitating the voices of different people, and coloring the performance in a way that suits them. With the circumstance emotional state that it represents, by employing all energies, including body language, gestures, signals, etc., by stimulating the learner's arousal, imagination, and motivation, and facilitating learning to occur.

Motor abilities have a significant role in the creation of sports movements in general, and artistic gymnastics in particular, these movements have a significant and beneficial effect on the production of physical qualities and abilities that are essential for producing sports movements. The game of gymnastics is considered to be one of the most popular sports games on the planet and has a significant role in both amateur and professional athletics, it has begun to be more popular and viewed. It's one of the most important fundamental components of the educational curriculum in the physical education and sports science departments, because of the complexity and difficulty of the games in the majority of their abilities and movements in six different devices, each device has its own personal rules, regulations, and privacy.

Since some of the artistic gymnastic abilities on the floor are difficult to master (standing on the hands on the floor, or lying on the floor), these abilities are primarily developed by women, and require the coordination of the legs, torso, and hands in order to occur. This necessitates the outside of the common way for those abilities. Skills to surmount obstacles in the path in performance, so the researcher must create a educational curriculum using the Forrest approach, this is different from the educational approaches employed by the subject teacher. The primary objective and purpose of it is to assist students in higher-thinking and creative solutions to problems that improve their motor skills and artistic abilities, and lead to the goal. The integral part of the educational facility.

As a result, the significance of the research: because the utilization of the Forrest model is one of the most significant modern educational models when applied in learning some artistic gymnastics skills for female students, and because it has an essential role in providing an opportunity for female learners to find solutions to educational problems during the performance that they direct by stimulating their brainstorming to reach an acceptable degree of mastery. Technical performance of skills by female learners according to the time period given to them.

RESEARCH PROBLEM

It's clearly understood that the characteristics of the curriculum and the contemporary models employed by the subject teacher have a significant impact on the acquisition, development and demonstration of skills, particularly those that are characterized by difficulty and high consistency Since there are many details involved in performance, the researcher tackled this research challenge by asking teachers for their thoughts of gymnastics about the degree to which female students have progressed in the performance of the studied skills and they confirmed that it is not at the required level because the movements are characterized by difficulty and need precision in learning them and noting the weak points that cause failure in skill performance and the limitations. Performance and there is a weakness in their motor abilities, so she used an educational model different from the method used by the subject teacher in improving and developing the motor abilities of the female students and teaching them the researched skill through the program used to achieve the basic goal of the educational process.

RESEARCH OBJECTIVES

1. Creating a educational program using the Forrest model in regards to some motor abilities and learning some of the skills associated with standing on the floor in artistic gymnastics for females.
2. Knowing the effect of the educational program using the Forrest model on specific motor abilities and the learning of the art of standing on a mat in the floor of artistic gymnastics for females.

RESEARCH HYPOTHESES

1. The educational program using the Forrest model has a positive effect on some motor abilities and the learning of how to stand on the floor in the artistic gymnastic for females.
2. Describe the favored outcome for the control and experimental groups.

RESEARCH METHODOLOGY

The researcher employed the experimental approach with equal groups that participated in pretests.

The research community and its sample

There were 55 female students in the third stage (College of Physical Education and Sports Sciences, University of Karbala), which reduced the research population. A straightforward random procedure was used to choose the sample, which was then split into two groups (experimental and control). The numbering of (5) for the experiment's reconnaissance was (50).

Homogeneity of the research sample

To demonstrate the uniformity of the research sample members, the variables of height, weight, and skills were measured because of their association with height, weight, and the research variables in question, by taking the coefficient of variation.

Table 1. Indicates the uniformity of the research population in regards to height, weight, and research parameters

Variables	Units	df between groups	df within groups	Levin value	Type of significance
Weight	Kg	1	38	395	Non sig.
Height	Cm	1	38	0,151	Non sig.

Equivalence of the research sample

To detect and ensure the equality of the groups (the experimental group and the control group), the researcher employed the (t) test for both groups. The investigator achieved the results listed in the following tables(2).

Table 2. Indicates the similarity of the experimental and control groups

Tests	Groups	mean	STDEV	(t) Value	Significance level
Stand on hands on floor mat	Control	16.25	0.79	0.16	Non sig.
	Experimental	17.90	0.85		

Methods, devices and tools used in the research

- The interview.
- Note.
- Testing and measurement.
- Questionnaire.
- Dell laptop
- Completely balanced.

THE PROCEDURE OF FIELD RESEARCH

Identifying some motor abilities. The researcher identified some motor abilities

1. Motor balance.
2. Motor compatibility.
3. Movement flexibility.

Determine tests for some motor abilities

After reviewing scientific sources and previous studies, I used a set of tests that fit the topic and variables of the study and were most appropriate for them.

Conditions for implementing tests

In order to obtain accurate and objective results when conducting tests for some motor abilities and their suitability to the research sample, there are conditions and standards that must be followed.

1. Clarity of instructions for tests and understanding of their contexts and procedures by testers.
2. Providing appropriate and appropriate equipment and tools for tests.
3. The extent of the testers' motivation and response to the test accurately.

DESCRIPTION OF TESTS

First: Flexibility test

- Test name: Dynamic flexibility test .[2]
- Purpose of the test: flexion, extension and rotation of the spine.
- Utilized tools: electronic stop watch, wall clock.
- Test specifications: An " X" is positioned on two points on the floor near the students' feet and on the wall in the middle. When she receives the start signal, the student bends and extends their torso forward and down to make contact with the ground with their fingertips at the " X" mark between their feet. After that, she extends her torso forward while rotating to the left. Come on over to the x mark afterward.

Second: Moving balance test[3]

- Test name: Walking on the ledge
- The purpose of the test: equalizing
- Supplies: a balance beam (with a width of (10) cm, a length of (4) m, and a thickness of (3-5) cm on flat ground, a stop watch.
- Conducting the test: The tester travels to the end of the beam upon receiving the start signal, then turns around and heads back to the beginning as quickly as possible, making sure that no part of their body touches the ground outside the beam.

Third: Test: Static Equilibrium[4]

- Test name: Anxious standing
- Test purpose: to measure static balance
- Tools used: stopwatch.
- Test specifications: From the normal standing position, the student raises her leg, places the sole of her foot on the knee from the inside, and places both hands on the waist. When she gives the trainer the start signal, the student raises the heel of the foot she is standing on in order to rest on the ball of the foot, as she tries to maintain balance for the longest possible period of time without any accident occurring. A movement that could change the standing position or touch the heel.
- Procedures: The student is given three attempts and the best time is recorded from the moment the heel is raised until she loses balance.

A METHOD OF ASSESSING THE SKILL OF ARTISTIC GYMNASTICS

Experts in artistic gymnastics evaluated the student's ability by assigning them a score between 0 and 10. Three specialist judges were used by the researcher, and each student made three tries, which were recorded. A visual presentation to the referees was then used to assess the performance's efficacy (the preparation comprised three degrees, the major portion five degrees, and the end portion two degrees).

Exploratory experience

On January 15, 2003, the researcher started a study with five A random selection of female students from the research community to take motor capacity tests the starting point for scientific research.

The researcher dissected the scientific theories underlying the assessments of different motor skills:

1. Test validity: To evaluate the test's validity, the researcher used content validity on a group of seasoned professionals.
2. Test stability: After starting the tests on the exploratory group, the researcher repeated them seven days later, and the results were identical to those from the week before.

The exploratory experiment of the learning model scale (Forrest)

On January 25th, 2023, the investigator visited the scale on a sample of (10) female students that were selected at random from the research population. The instructions were lucid and the duration of the response to each of these methods for the scale (5-10) minutes was appropriate for use on sample members' searches.

Educational initiatives utilizing the Forrest approach

Members of the experimental group were instructed by the researcher using educational units based on the Forest learning paradigm, which include:

- Test group: The educational program began on Sunday, February 1st, 2023, and ended on Sunday, March 20th, 2022. In a sense, it contained the proper exercises for the educational units to understand the explored subject and unique responsibilities utilizing the Forest Model technique that was consonant with the students' preferences, abilities, desires, and capabilities, and to augment some of their motor abilities. I eagerly anticipated The researcher's assurance that the groups would have no disparities in any part of the educational units, this was (4) educational units..
- Posttests: On February 20, 2023, the researcher collected the data and recorded it in forms meant for processing it after the participants had finished applying the educational program, which comprised eight educational units. The post-measurement was conducted to evaluate the participants' capacity in relation to the research and on all members of the basic experiment's sample from the experimental and control groups, under the same conditions and specifications as the premeasurement.According to statistics.

RESULTS AND DISCUSSIONS

- **Presenting the results of the pre- and post-measurement teams for the individuals in the research sample**

Table 3. Differences the pre and post-test scores of members of the control group regarding the research variables

Tests	Pretests	Posttests	mean diff.	STDEV diff.	(t) value	Significance level	Indication		
	mean	STDEV	mean	STDEV					
Stand on hands on floor mat	3.05	0.76	4.40	0.82	1.35	0.59	10.28	0.000	Sig.

The results demonstrated that there were significant differences, and the advantage was for the experimental group that employed the Forest learning model, as this is The model is motivating and has a tendency that concords with the learners' desires. The researcher attributed this progression to the control group, which followed the subject teacher's curriculum, the approved teaching method and the repetitions that occurred during the educational units, as well as the difficulty and ease of the skills and movements that led to the acquisition of the desired results (Motor learning is the process by which an individual develops the ability to perform a particular task, either by choice or necessity).[5] Through the table above, the researcher attributed this increase to the exercises that accompanied the educational units in the educational program and the specific selection of these exercises facilitated the acquisition of the researched skill. Taking into account its potential to accommodate students' preferences and inclinations, as well as their abilities, taking into account the constant repetition of motions, as well as the increasing difficulty of the movements and skills, which were all performed by everyone.

- **Presentation of the results of the pre and post-tests of the experimental variables, respectively.**

Table 4. Demonstrate the presentation, findings, and analysis of the pre and post-tests of the experimental variables for the experimental group

Tests	Groups	mean	STDEV	mean diff.	STDEV diff.	(t) value	Significance level	Indication
Stand on hands on floor mat	Control	2.95	0.89	4.15	0.25	16.33	0.00	Sig.
	Experimental	7.10	9.79					

- **The presentation and analysis of the post-test results of the experimental and control groups regarding the research variables**

Table 5. Differences in post-tests between members of the experimental and control groups regarding the research variables are demonstrated

Tests	Groups	mean	STDEV	mean diff.	STDEV diff.	(t) value	Significance level	Indication

Stand on hands on floor mat	Control	4.40	0.82	10.61	0.13	10.61	0.00	Sig.
	Experimental	7.10	9.79					

The researcher instructed the experimental group to prefer the Forrest Scientific model, using this method using technological learning techniques (Data show), through slides explaining how to perform with a brief explanation of the performance, as well as showing video films explaining the skill, as well as using a laptop. Thus, the researcher agrees with Mufti Ibrahim that "Educational means are a basic pillar in the educational or training process. The successful teacher is the one who uses these means well in addition to the other elements that he possesses in various educational or training situations. The process of using the educational means must be organized, so we should not exaggerate in its use or neglect its use".[6] The use of educational means in itself puts the player or learner in a positive, interactive position with the educational situation, and it moves him from a passive, passive learner to broader areas of fruitful interaction with the educational situations that he experienced inside and outside the educational or training unit. The researcher also suggests these results to the use of exercises in The educational program that helped in learning and gaining the body's beauty, flow, and accuracy in performance, as well as learning technique and improving motor abilities through developing their neuromuscular coordination. Giving exercises and gradually increasing them at levels of difficulty and continuing to perform them, in which more than one member of the body participates, helped this. In executing the required movements and also helping in correcting errors, through the educational program it is possible to measure the amount of learning or performance and develop the skills studied in artistic gymnastics. The researcher attributes the reason for this learning and acquisition of the researched skill to the students' response to all learning requirements during the educational units as it is one of the most important effective means. To highlight the energies, maintain the level, and achieve the best performance according to his inclinations and desires, as well as the effectiveness in applying this model (Forrest) in his steps, helped to develop the investigated motor abilities by increasing the flexibility of the joint, the effectiveness of performance, and developing the body's balance using educational methods and model different from the followed model, and the researcher also took into account individual differences. Among the learners in preparing the prepared program and continuing to give feedback, as individual differences are the variation and difference in the level of abilities or deviation from the group average in various characteristics, as each activity is distinguished from the other by training components that affect it physically, technically, and psychologically.

CONCLUSIONS

1. Creating a educational program using the Forrest model in regards to some motor abilities and learning the art of standing on the floor of the mat in the women's artistic gymnastics, this will prepare them for the upcoming competitions.
2. The results demonstrated that the students of the third stage have a preference for the learning style, the Forrest model in the development of physical abilities and the learning of the skill of standing on the mat in artistic gymnastics for females.

RECOMMENDATIONS

1. It's more effective to pay attention to the educational system that facilitates the student in learning according to their preferences, desires and abilities by giving them the opportunity to experiment with what they'd like to test.
2. It's more effective to conduct a similar investigation for other individuals and stages of students in the College of Physical Education and Sports Sciences.

REFERENCES

1. Muhammad Sobhi Hassanien: Measurement and Evaluation of Physical Education and Sports Sciences, Part 2, Cairo, Dar Al-Fikr Al-Arabi, 2003.
2. Wadih Yassin and Yassin Muhammad: Physical preparation for women, Dar Al-Kitab for Printing and Publishing, Mosul, 1986.
3. Sobhi Hassanein: Mathematical Physiology and Morphology and Methods of Measurement and Evaluation, 1st edition, Cairo, Dar Al-Fikr Al-Arabi, 1997.
4. Mufti Ibrahim Hamada; Modern sports training, application and leadership: (Cairo University, Dar Al-Fikr Al-Arabiya, 1991)
5. Muhammad Othman: Motor activity and sports training, Kuwait, Dar Al-Qalam, 1987, p. 124.
6. Nahida Abd Zaid: Basics in Motor Learning, ed., Al-Najaf Al-Ashraf, Dar Al-Diyaa for Printing and Publishing, 2008.